

IN THE CLAIMS:

1. (Currently Amended) A data transmission controlling method for controlling transmission of data from data transmitting means to data receiving means over communication channels, said data transmission controlling method comprising the steps of:

transmitting data encrypted by said data transmitting means to said data receiving means over a first communication channel provided for data transmission from said data transmitting means to said data receiving means; and

transmitting to said data receiving means restrictive data transmission control information for causing the encrypted data to be received solely by specific data receiving means at least over a second communication channel which, having a smaller capacity of data transmission than said first communication channel, is also used for data transmission from said data receiving means to said data transmitting means;

whereby said data transmitting means performs a data encapsulation operation on said encrypted data prior to transmitting said encrypted data over said first communication channel ~~said second communication channel is not used to transmit said encrypted data.~~

2. (Original) A data transmission controlling method according to claim 1, wherein said second communication channel is a communication channel permitting bidirectional communication between said data transmitting means and said data receiving means.

3. (Original) A data transmission controlling method according to claim 1, wherein said data transmitting means performs data encryption using an encryption key and wherein said encrypted data from said data transmitting means are decrypted by said data receiving means utilizing a decryption key identical to said encryption key used in the data

encryption.

4. (Original) A data transmission controlling method according to claim 3, wherein said encryption key and said decryption key are session keys for encrypting and decrypting information and data.

5. (Original) A data transmission controlling method according to claim 4, wherein said session keys are updated at predetermined intervals.

6. (Original) A data transmission controlling method according to claim 4, wherein said data transmitting means and said data receiving means have a master key specific to said data receiving means;

wherein said data transmitting means encrypts said session keys using said master key and transmits the encrypted session keys to said data receiving means over either said first communication channel or said second communication channel; and

wherein said data receiving means decrypts said encrypted session keys received using said master key.

7. (Original) A data transmission controlling method according to claim 6, wherein said data transmitting means possesses said session keys corresponding to all data receiving means authorized to receive specific information and data; and

wherein said data transmitting means transmits in advance said session keys to said data receiving means authorized to receive specific information and data.

8. (Original) A data transmission controlling method according to claim 1, wherein said first communication channel is a satellite link permitting unidirectional communication from said data transmitting means to said data receiving means; and

wherein said second communication channel is a communication channel

permitting bidirectional communication between said data transmitting means and said data receiving means.

9. (Original) A data transmission controlling method according to claim 1, wherein said data receiving means is constituted as an IP router.

10. (Original) A data transmission controlling method according to claim 1, wherein said data receiving means is constituted as a bridge.

11. (Currently Amended) A data transmission system comprising:
data transmitting means for encrypting data and transmitting the encrypted data;
data receiving means for receiving said encrypted data from said data transmitting means;

a first communication channel used for data transmission from said data transmitting means to said data receiving means; and

a second communication channel which is also used for data transmission from data receiving means to said data transmitting means and which has a smaller capacity of data transmission than said first communication channel;

wherein said first communication channel is used to transmit said encrypted data;
and

wherein at least said second communication channel is used to transmit restrictive data transmission control information for causing said encrypted data to be received solely by specific data receiving means;

whereby said data transmitting means performs a data encapsulation operation on said encrypted data prior to transmitting said encrypted data over said first communication channel ~~said second communication channel is not used to transmit said encrypted data.~~

12. (Original) A data transmission system according to claim 11, wherein said data transmitting means performs data encryption using an encryption key and wherein said encrypted data from said data transmitting means are decrypted by said data receiving means utilizing a decryption key identical to said encryption key used in the data encryption.

13. (Original) A data transmission system according to claim 12, wherein said encryption key and said decryption key are session keys for encrypting and decrypting information and data.

14. (Original) A data transmission system according to claim 13, wherein said session keys are updated at predetermined intervals.

15. (Original) A data transmission system according to claim 13, wherein said data transmitting means and said data receiving means have a master key specific to said data receiving means;

wherein said data transmitting means encrypts said session keys using said master key and transmits the encrypted session keys to said data receiving means over either said first communication channel or said second communication channel; and

wherein said data receiving means decrypts said encrypted session keys received using said master key.

16. (Original) A data transmission system according to claim 15, wherein said data transmitting means possesses said session keys corresponding to all data receiving means authorized to receive specific information and data; and

wherein said data transmitting means transmits in advance said session keys to said data receiving means authorized to receive specific information and data.

17. (Original) A data transmission system according to claim 11, wherein said

first communication channel is a satellite link permitting unidirectional communication from said data transmitting means to said data receiving means.

18. (Original) A data transmission system according to claim 11, wherein said data receiving means is constituted as an IP router.

19. (Original) A data transmission system according to claim 11, wherein said data receiving means is constituted as a bridge.

Claims 20-37 (Cancelled)